# Pesticide Warehouse I (PWI)

**Puerto Rico** 

EPA ID#: PRD987367349

#### **EPA REGION 2**

Congressional District(s): 01

Arecibo

State Road No. 2 further to the east is the Murcielago Warehouse property owned by the Puerto Rico Land Authority

NPL LISTING HISTORY Proposed Date: 9/23/2004 Final Date: 9/27/2006

## **Site Description**

Pesticide Warehouse I (PWI) is an active pesticide storage warehouse located in a rural/industrial area of Arecibo, Puerto Rico. PWI occupies approximately one acre and consists of a main warehouse, a smaller secondary warehouse in the rear of the property, and a small storage shed. It is bounded to the south by State Road No. 2 and to the east, north, and west by wooded areas.

Historically, PWI was owned by the Puerto Rico Land Authority (PRLA). PWI has been operating at this location since 1953 and supplies pesticides for pineapple crops in the surrounding area. PWI is used for the storage and preparation of insecticides, herbicides, and fertilizers (hereafter collectively referred to as pesticides). PRLA used the Site to store and/or dilute pesticides and fertilizers for agricultural application in pineapple farming. Pesticides were diluted in the pineapple field prior to their application, operations include mixing pesticides with water in tanker trucks. Leftover and excess pesticides have been disposed on the ground adjacent to the main warehouse. Beginning on October 1, 1999, the Property was leased to Respondent Agrocampos, Inc., which also used the Site to store and/or dilute pesticides and fertilizers for agricultural application in pineapple farming.

In a March 1996 investigation, EPA observed numerous indications of poor housekeeping practices at PWI including: broken bags of pesticides and 25 drums in the main warehouse without secondary containment measures; pesticide bottles scattered throughout the property; a 20-foot by 20-foot excavation in the northwest corner of the property that contained empty pesticide bottles, Malathion labels, and bags of Vydate, Gramoxone and magnesium sulfate; visible pesticide residue at several locations throughout the property; and a white residue along what appeared to be the surface runoff pathway that began at the mixing platform in front of the main warehouse. The white residue was visible for approximately 100 feet to the fence line where it entered a culvert. The residue was observed to continue from the culvert approximately 1,500 feet along a drainage ditch paralleling State Road No. 2, passing the property well and entering a vegetated area.

In May 1996, EPA conducted a Site Inspection ("SI") sampling event at the Site, collecting 15 surface soil samples throughout the property and two ground water samples from the property well. Analytical results of surface soil samples indicated the presence of several pesticides, including aldrin, endrin, endrin aldehyde, gamma-chlordane, toxaphene, diazinon, and diuron. Analyses of the groundwater samples indicated the presence of heptachlor epoxide, dieldrin, 4,4'-DDE, and endrin. In December 2001, EPA conducted a follow up reconnaissance investigation during which EPA observed the mixing of pesticides with water in tanker trucks, an absence of vegetation at the Site, and the presence of stressed and blackened vegetation along the surface runoff pathway adjacent to the Property access road. Poor housekeeping was once again observed including the scattering of empty pesticide bottles throughout the Property.

The topography surrounding the Site is characterized by numerous karst features including sink holes and limestone hills. Available background information indicates that the upper aquifer is unconfined and is hydraulically connected to the overlying surficial deposits, which were found to contain elevated levels of several pesticides in certain areas. Information obtained from the Puerto Rico Aqueduct and Sewer Authority indicates that approximately 48,600 people are served by public supply wells within 4 miles of the Site. Soil contamination in the area also poses a potential threat to workers at Property.

Pursuant to Section 105(a) of CERCLA, 42 U.S.C. §9605(a), EPA placed the Site on the National Priorities List, set forth at 40 C.F.R. Part 300, Appendix B, by publication in the Federal Register on September 26, 2006, 71 Fed. Reg. 56399.

### **Threat and Contaminants**

Surface soil samples indicated the presence of several pesticides, including aldrin, endrin, endrin aldehyde,

gamma-chlordane, toxaphene, diazinon, and diuron. Analyses of the ground water samples from the property well indicated the presence of heptachlor epoxide, dieldrin, 4,4'-DDE, and endrin.

Historical and present operations at PWI have resulted in soil and ground water contamination. Ground water contamination in the area potentially threatens public supply wells within 4 miles of PWI. The Puerto Rico Aqueduct and Sewer Authority indicates that approximately 48,600 people are served by public supply wells within 4 miles of PWI. Soil contamination in the area also poses a potential threat to workers at PWI.

## **Cleanup Approach**

Due to the complexity of the karst terrain hydrogeology at the Site, EPA has determined that the Site investigation and remediation should be addressed in two Operable Units. The first Operable Unit ("OU1"), will evaluate the soil contamination. The second Operable Unit ("OU2"), will determine the nature and extent of groundwater contamination at the Site.

## **Cleanup Progress**

On August 18, 2006, EPA issued a notice letter to PRLA and Agrocampos notifying them that, based on information collected by EPA, EPA had reason to believe that the PRLA, as the current owner of the Site, and Agrocampos, as a former operator at the Site, were owners and operators of the Site, respectively, during the time of disposal of hazardous substances. Accordingly, both PRLA and Agrocampos, Inc. could be liable with respect to the Site under Section 107(a) of CERCLA, 42 U.S.C. Section 9607(a).

EPA and Respondents (Puerto Rico Land Authority and Agro Campo, Inc) have negotiated in good faith over the terms of two Administrative Agreement Orders on Consent (OU1 and OU2 Orders). The Orders are issued pursuant to Sections 104, 107 and 122 of CERCLA, 42 U.S.C. §§ 9604, 9607 and 9622. Under the OU1 Order, Respondents will perform the Remedial Investigation / Feasibility Studey (RI/FS) for OU1 to determine the extent of soil contamination at the Site. Under the OU2 Order, Respondents will perform the RI/FS for OU2 to determine the extent of groundwater contamination at the Site.

EPA and the PRPs are in the process of begining field work at this site during 2008. EPA has developed the statement of work that describe the requirements for conducting the work for the RI/FS to ultimately determine if a remedy is needed to eliminate, reduce, or control risks to human health and the environment at the Site.

## **Site Repositories**

Agencia Federal de Proteccion Ambiental Division de Proteccion Ambiental del Caribe Edificio Centro Europa, Suite 417 1492 Avenida Ponce de Leon San Juan, Puerto Rico 00909 (787) 977-5865

P.R. Environmental Quality Board Edificio de Agencias Ambientales 1308 Avenida Ponce de Leon Carretera PR # 8838 Sector El Cinco, adyacente Jardin Botanico UPR Rio Piedras, Puerto Rico 00926 Contact: Mr. Pascual Velazquez Phone: (787) 767-8181, extention 3215 Hours: 8:00 A.M. to 4:30 P.M. - Monday through Friday (excluding holidays)